

Claims

1. A cable storage (1) comprising a housing with a cable (25) inserted therein, wherein the housing comprises at least one cable inlet (13) and one cable outlet (14), and wherein the cable (25) is inserted into the housing in substantially concentric circles, and enters the housing through the cable inlet (13) and exists through the cable outlet (14), wherein the cable inlet (13) and the cable outlet (14) are arranged on the outer periphery of the housing, characterized in that the cable (25) is inserted according to an insertion pattern which is chosen such that parts of the cable are pre-twisted in different directions.
2. A cable storage (1) as claimed in claim 1, characterized in that the cable (25) initially takes the shape of an eight and subsequently the upper circular element of the eight formed is placed against the lower circular element to form one single circular element which can be inserted into the cable storage.
3. A cable storage (1) as claimed in claim 2, characterized in that the circular elements which are placed against each other form the upper circular element for a further eight to be laid from the cable (25).
4. A cable storage (1) as claimed in one of claims 2 or 3, characterized in that the one cable end (26) rests over the other cable end (27) in each crossing course of the cable ends.
5. A cable storage (1) as claimed in claim 1, characterized in that the cable (25) is inserted as winding body, comprising an even number of individual windings, wherein the one cable end (26) crosses the other cable end (27) in each crossing course one time above and one time below.
6. A cable storage (1) as claimed in one of claims 1 to 5, characterized in that the housing comprises at least one housing frame (2) and one cover (3).

15

7. A cable storage (1) as claimed in claim 6, characterized in that each housing frame (2) is formed as a U-shaped belt, comprising two U-legs (5, 5') extending in parallel to each other and a semi-circular base portion (6) formed integrally with the U-legs (5, 5').

5

8. A cable storage (1) as claimed in claim 7, characterized in that the internal diameter of the semi-circular base portion (6) is slightly larger than the diameter of the in concentric circles inserted cable (25).

- 10 9. A cable storage (1) as claimed in claims 7 or 8, characterized in that the length of the U-legs (5, 5') corresponds at least to the radius of the semi-circular portion (6).

- 15 10. A cable storage (1) as claimed in one of claims 6 to 9, characterized in that the two U-legs (5, 5') of the housing frame (2) are connected to one another at least on their ends opposing the base portion (6) via at least one detachably fastened bracing element (9); which extends between the opposing internal sides of the U-legs (5, 5').

- 20 11. A cable storage (1) as claimed in claim 10, characterized in that two bracing elements (9) spaced apart from each other are provided on the ends of the U-legs (5, 5') opposing the base portion (6), wherein one bracing element (9) is arranged on the side facing the bottom and one bracing element (9) is arranged on the side facing the cover.

25

- 30 12. A cable storage (1) as claimed in one of claims 6 to 9, characterized in that the U-legs (5, 5') are connected to one another through at least two detachably fastened bracing elements (9) extending in parallel to each other and being spaced apart from each other, wherein one bracing element (9) is arranged on the ends of the U-legs (5, 5') opposing the base portion (6), and one bracing element is arranged in the proximity of the ends of the U-legs (5, 5') facing the base portion (6).

16

13. A cable storage (1) as claimed in claim 12, characterized in that two bracing elements (9) each extending in parallel to one another and being spaced apart from each other are arranged on the ends of the U-legs (5, 5') opposing the base portion (6) and in the proximity of the ends of the U-legs (5, 5') facing the base portion (6), wherein one of the bracing elements (9) is arranged on the side facing the bottom and one bracing element (9) is arranged on the side facing the cover.
14. A cable storage (1) as claimed in one of the characterized in that the bracing elements (9) have a square cross section.
15. A cable storage (1) as claimed in one of claims characterized in that each bracing element (9) comprises at least one through opening (12) formed approximately in the centre of the bracing element (9) and opening towards the bottom or cover.
16. A cable storage (1) as claimed in one of claims 6 to 15, characterized in that a bottom element (7) is arranged in the area of the semi-circular base portion (9).
17. A cable storage (1) as claimed in claim 16, characterized in that the bottom element (7) connects to the lower edge of the semi-circular base portion (6) on the end opposing the U-legs (5, 5') to extend approximately across half of the radius of the semi-circular base portion (6) towards the U-legs (5, 5').
18. A cable storage (1) as claimed in one of claims 6 to 17, characterized in that a plurality of housing frames (2) are releasably stacked on top of each other.
19. A cable storage (1) as claimed in claim 18, characterized in that a connection element is arranged between two housing frames (2) arranged on top of each other, said connection element ensuring a detachable connection between the two housing frames (2).

17

20. A cable storage (1) as claimed in one of claims 18 or 19, characterized in that the connection element (21) is arranged in the lower area of the outer side of the housing frame (2) that is on top in the assembled condition, that it extends over the entire outer periphery of the housing frame (2) and in assembled condition projects over a predetermined length to the lower housing frame (2).

21. A cable storage (1) as claimed in one of claims 18 to 20, characterized in that the connection element (21) comprises a seal.

22. A cable storage (1) as claimed in one of claims 6 to 21, characterized in that the cable inlet (13) and the cable outlet (14) are arranged in the semi-circular base portion (6) and are each formed as a recess (15) opening towards the upper edge (11).

23. A cable storage (1) as claimed in claim 22, characterized in that the cable inlet (13) and the cable outlet (14) are formed by a through opening (15) extending along the outer periphery, said through opening opening towards the upper edge (11) over a recess (126) formed centrally in the upper longitudinal side.

24. A cable storage (1) as claimed in one of claims 1 to 23, characterized in that the cable inlet (13) and the cable outlet (14) are arranged opposite to one another.

25. A cable storage (1) as claimed in one of claims 6 to 24, characterized in that the cover (3) is slightly larger than the surface formed between the U-legs (5, 5') and the semi-circular base portion (6), wherein the cover (3) is provided on its edge with a border (4) extending downwards towards the housing.

26. A cable storage (1) as claimed in claim 25, characterized in that the cover (3) is provided in the area of the border (49) with through openings for the detachable fixing of the cover on the housing frame (2).

27. A cable storage (1) as claimed in one of claims 25 or 26, characterized in that the cover (3) comprises at least one through opening for the detachable connection with at least one bracing element (9).
- 5
28. A cable storage (1) as claimed in one of claims 6 to 27, characterized in that the housing frame (2) is provided with holding projections (17) on both sides on the outer side of the U-legs.
- 10
29. A cable storage (1) as claimed in claim 28, characterized in that the holding projections are formed on the ends of the U-legs (5, 5') opposing the semi-circular base portion (6).
- 15
30. A cable storage (1) as claimed in one of claims 28 or 29, characterized in that the holding projections (17) are formed as an angle plate (18, 19).
- 20
31. A cable storage (1) as claimed in one of claims 1 to 30, characterized in that the individual elements of the cable storage are made of metal and/or plastics.
32. A cable storage (1) as claimed in claim 31, characterized in that the cover (39), the housing frame (2) and the bracing elements (9) are made of steel, stainless steel or aluminium.